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Substitute for form 1449/PTO

Sheet 1

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

US- 5,963,244

<sup>US-</sup> 5,844,680

US- 5.838,451

Application Number 10/669,110 Filing Date September 23, 2003 First Named Inventor Steven H. Peterson Art Unit 2877 Examiner Name

Attorney Docket Number 64384.81710-001

Complete if Known

U. S. PATENT DOCUMENTS **Publication Date** Name of Patentee or Pages, Columns, Lines, Where **Document Number** MM-DD-YYYY Applicant of Cited Document Relevant Passages or Relevant Initials' Figures Appear Number-Kind Code<sup>2</sup> (# know <sup>US-</sup> 6,603,551 08-05-2003 Mestha et al <sup>US-</sup> 6,574,425 06-03-2003 Weiss et al US- 6,567,170 05-20-2003 Tandon et al US- 6,556,300 04-29-2003 Tandon et al US- 6,538,770 03-25-2003 Mestha 07-16-2002 <sup>US-</sup> 6,419,340 Wickham et al 06-18-2002 US- 6,405,929 Ehrhart et al US- 6.384,918 05-07-2002 Hubble, III et al US-6,373,568 04-16-2002 Miller et al US- 6.351,308 02-26-2002 Mestha US- 6,178,007 01-23-2001 Harrington US- 6,157,469 12-05-2000 Mestha <sup>US-</sup> 6.157,454 12-05-2000 Wagner et al Walowit et al US- 6,147,761 11-14-2000 US- 6,020,583 02-01-2000 Walowit et al 10-05-1999 Walowit et al US- 5,963,333 Mestha et al

	FOREIGN PATENT DOCUMENTS									
	Cite No.		Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages					
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Sperling

McCarthy

10-05-1999

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Examiner Signature  Date Considered 10 - 2005		
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	INFORMATION DISCLOSURE	Filing Date	September 23, 2003		
		First Named Inventor	Steven H. Peterson		
	STATEMENT BY APPLICANT	Art Unit	2877		
	(Use as many sheets as necessary)	Examiner Name			
こ	Sheet 2 of 4	Attorney Docket Number	64384.81710-001	7	

		<u> </u>	U. S. PATENT	T DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Document Number  Number-Kind Code <sup>2 (# known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
a.		US- 5,748,221	05-05-1998	Castelli et al	
(SE		<sup>US-</sup> 5,671,059	09-23-1997	Vincent	·
60		US- 5,612,902	03-18-1997	Stokes	
68	-	<sup>US-</sup> 5,604,567	02-18-1997	Dundas et al	
a		<sup>US-</sup> 5,526,190	06-11-1996	Hubble, III et al	
WE		<sup>US-</sup> 5,377,000	12-27-1994	Berends	
a		<sup>US-</sup> 5,303,037	04-12-1994	Taranowski	
66		US- 5,272,518	12-21-1993	Vincent	
42		US- 5,266,792	11-30-1993	Crowne et al	·
ar		<sup>US-</sup> 5,210,590	05-11-1993	Landa et al	
al		<sup>US-</sup> 5,150,174	09-22-1992	Ryczek et al	
W		<sup>US-</sup> 5,137,364	08-11-1992	McCarthy	,
de		<sup>US-</sup> 5,078,497	01-07-1992	Borton et al	
46		us- 4,989,985	02-05-1991	Hubble, III et al	
46		us- 4,986,665	01-22-1991	Yamanishi et al	
66		US- 4,964,692	10-23-1990	Prescott	,
(is		<sup>US-</sup> 4,917,500	04-17-1990	Lugos	
as		<sup>US-</sup> 4,687,335	08-18-1987	Zupanick et al	•
13		<sup>US-</sup> 4,568,191	02-04-1986	Barry	

	FOREIGN PATENT DOCUMENTS									
. Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages					
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	Substitute for form 1449/PTO	Complete if Known		
		Application Number	10/669,110	
	INFORMATION DISCLOSURE	Filing Date	September 23, 2003	
		First Named Inventor	Steven H. Peterson	
	STATEMENT BY APPLICANT	Art Unit	2877	
	(Use as many sheets as necessary)	Examiner Name		
$\overline{}$	Sheet 3 of 4	Attorney Docket Number	64384.81710-001	

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Examiner Initials*	Cite No.	Document Number  Number-Kind Code <sup>2 (F known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevan Figures Appear
W		US- 4,553,033	11-12-1985	Hubble, III et al	
(is		<sup>US-</sup> 4,111,556	09-05-1978	Grisar et al	
W		us- 3,910,701	10-07-1975	Henderson et al	
W		US- 3,715,163	02-06-1973	Mitchell	
The state of the s		<sup>US-</sup> 2003/0142314	07-31-2003	Hubble, III et al	
(D)		us- 2003/0132982	07-17-2003	Tandon et al	
W		US- 2003/0122502	07-03-2003	Clauberg et al	
66		us- 2003/0086090	05-08-2003	Tandon et al	
66		US- 2003/0067502	04-10-2003	Arquilevich et al	
(B)		US- 2003/0063275	04-03-2003	Hubble, III et al	
av		US- 2003/0048449	03-13-2003	Vander Jagt et al	
66		US- 2002/0191188	12-19-2002	Hubble, III et al	
as		<sup>US-</sup> 2002/0191183	12-19-2002	Tandon et al	
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Substitute for form 1449/PTO			Complete if Known			
Substitute	01 10(11) 1443/1-10			Application Number	10/669,110	
INFO	RMATION	DIS	CLOSURE	Filing Date	September 23, 2003	
STAT	EMENT B	Y A	PPLICANT	First Named Inventor	Steven H. Peterson	
		.4		Art Unit	2877	
(Use as many sheets as necessary)			ecessary)	Examiner Name		
Sheet	4	of	4	Attorney Docket Number	64384.81710-001	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
<b>L</b> ib		Keyence Corporation, "Color-Differentiating Fiberoptic Sensor" product brochure, 12/2002, pp 1-8	
· W		Delta Computer Systems, "CS64A Color Sensors," product brochure, 2001, pp 1-22	
μÉ	·	Keyence Corporation, "Highly Advanced RGB Digital Fiberoptic Sensor," downloaded from http://world.keyence.com/newprod/cz_k.html, 8/15/2002, pp 1-8	
KE		Vydas International Marketing, "Programmable Colour Sensor," downloaded from http://www.ssensorsforindustry.com/prod21.htm, 8/12/2002, pp 1-4	
W.		Sick Optic Electronics, "CS1 Color Sensor," product brochure, 612003, pp 364-369	
μÉ		Balluff Inc., "Inductive Sensors 2002: The NEW BFS-26K Sees Your True Colors!," downloaded from http://www.balluff.com/BFS/default.htm, 8/12/2002	
W		Sensor Instruments GmbH, "SI-COLO Series," downloaded from http://www.johnkopplin.com/si-colo2-30-e.pdf, 1/25/2002	
ab		ZAND, et al, "Transimpedance Amplifier with Differential Photodiode Current Sensing," Univ. of Tornonto Dept. of Electrical and Computer Engineering, Vol 2, 1999, pp 624-627	
at		Burr-Brown Corporation, "Monolithic Photodiode and Amplifier," product brochure, 1994, pp 1-9	
(ik		Linear Technology, "Low Noise, Picoampere Bias Current, JFET Input Op Amp," product brochure, 1999, pp 1-12	

Examiner		Date	
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14		Attorney Docket Number	64384 81710-001	フ		

U. S. PATENT DOCUMENTS					
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